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09/871,390	05/31/2001	Daniel A. Maude	CAO-0090	9880

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EXAMINER
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EVANISKO, LESLIE J

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 08/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/871,390

Applicant(s)

MAUDE ET AL.

Examiner

Leslie J. Evanisko

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10/18/2004 & 05/02/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/04/01 & 02/26/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10-29-2004.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 1-11 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 7.

### ***Drawings***

2. The corrected or substitute drawings were received on February 26, 2003. These drawings, as well as the original drawing sheets filed September 4, 2001 are approved by the Examiner.

### ***Claim Objections***

3. Claims 12-26, 41-43, and 45-46 are objected to because of the following informalities:

With respect to claims 12, 21, 25 and 26, in the preamble of each claim, it is suggested that the term "of" be deleted and replaced with --on-- to correct an obvious typographical error.

Additionally, in claim 26, it is suggested that the language "where the nozzle applies a pattern to the earplug from a plurality of orientations; and" in

lines 6-7 be deleted to avoid repetitive language in the claim since similar language is recited in lines 9-10.

With respect to claims 45 and 46, the terms “said plurality of orientations” and “the at least one nozzle” in each of these claims has no proper antecedent basis since no plurality of orientations or at least one nozzle was previously recited in claim 27.

Appropriate correction and/or clarification is required.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the

applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 12-15, 17-20, 22-24, 27, 29-37, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley (US 5,655,453) in view of Merritt (Des. 349,571). Ackley teaches a process of applying a pattern to an object with a curved surface (such as a pellet or other cylindrical shaped object) including the steps of providing the object, orienting the object relative to a printing device, and printing a pattern on the object using the printing device. See, in particular, Figures 2 and 15 and columns 8-12. Although Ackley does not necessarily teach the object printed upon is an earplug, note Merritt teaches an ear protector having an indicia provided thereon is well known in the art. See, in particular, the Figure of Merritt. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide the printing process of Ackley to be used to print indicia upon a surface of any similar shaped object, such as an earplug or ear protector, to provide printed indicia upon earplugs to function as an advertisement or cheering aid.

With respect to claims 13-15 and 33-34, note Ackley teaches the use of a non-contact printing device (i.e., ink jet printhead) and an impact printing device in column 9, lines 57-66 and column 12, lines 29-48.

Furthermore, with respect to claim 17, although Ackley does not specifically state that the pattern formed is a dot matrix pattern, note that it is

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well known in the art that inkjet printing devices can be used to form dot matrix patterns. Therefore, there is no unobviousness in using the inkjet printer of Ackley to form a dot matrix pattern of the desired indicia.

With respect to claims 18-20 and 36-37, note the teaching in column 6, lines 27-30 and column 8, lines 34-39 of Ackley. Furthermore, note that Merritt shows a number indicia on the ear plug is well known in the art.

With respect to claims 22-23, note the object of Ackley is oriented by an alignment device 10, 12, 25 for positioning the object within or near the printing device and since the alignment device functions to move the objects throughout the printing process, it can broadly be considered to selectively position the object in “a plurality of orientations” as broadly recited by applicant.

With respect to claim 24, since the printing device of Ackley includes a pair of printheads or multiple printheads positioned along the device as set forth in column 8, lines 34-39, it can broadly be considered to apply a pattern to the object from “a plurality of positions” as recited.

With respect to claims 27 and 29, again note that Ackley in view of Merritt render obvious the process as recited. Note, in particular, the above comments with respect to claims 12-26 and that Ackley teaches communicating a pattern from a storage device to the printing device using a controller in column 9, line 57-column 10, line 14.

With respect to claims 30-32, note that Ackley teaches the use of inkjet printers including at least one nozzle for ejecting ink. Although Ackley is silent with respect to the particular details of the inkjet printer structure, note that inkjet printers including ejection of ink from nozzles with vibration as well as inkjet printers using charge electrodes to deflect the ink are well known in the art. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide any known inkjet printer structure of the inkjet device of Ackley as modified by Merritt, as it would simply require the obvious substitution of one known inkjet printhead arrangement for another to provide better printing of the indicia upon the article.

With respect to claim 35, note that Ackley teaches applying a pattern to the side surface of a cylindrical object is well known in the art, as exemplified by Figures 1 and column 12, lines 63-66.

With respect to claim 44, note the “funneling” effect that occurs to the pellets being placed into pockets 40 of orientation mechanism 10, 12, 25 described on page 9, lines 3-18 would clearly include rotation of the pellet relative to the printing device.

7. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley in view of Merritt as applied to claims 12-15, 17-20, 22-24, 27, 29-37 and 44 above, and further in view of Roulleau (US 5,142,976). Ackley in view of Merritt teach a process as recited with the exception of the particular type of

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contact printing device. Roulleau teaches that the use of an impact printing device such as a pad printing device for printing upon curved surfaces is well known in the art. See columns 1-2 and Figure 1 of Roulleau in particular. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide a pad printing device as taught by Roulleau in the printer of Ackley as modified by Merritt, as it would simply require the obvious substitution of one known impact printing device for another.

8. Claims 12-14, 17-20, 22-32, 34-37, 40, 42 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett (US 5,144,330) in view of Merritt (US Des. 349,571). Bennett teaches a process of applying a pattern to an object with a curved surface (such as a pipe or other cylindrical shaped object) including the steps of providing the object, orienting the object relative to a printing device, and printing a pattern on the object using the printing device. See, in particular, Figures 1 and 3 and columns 3-6. Although Bennett does not necessarily teach the object printed upon is an earplug, note Merritt teaches an ear protector having an indicia provided thereon is well known in the art. See, in particular, the Figure of Merritt. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide the printing process of Bennett to be used to print indicia upon a surface of any similar shaped object, such as an earplug or ear protector as shown in Merritt,



to provide printed indicia upon earplugs to function as an advertisement or cheering aid.

With respect to claims 13-14 and 34, note Bennett teaches the use of a non-contact printing device (i.e., ink jet printhead) in column 2, lines 65-68 and column 5, lines 16-24.

With respect to claim 17, note Figure 4 of Bennett in particular.

With respect to claims 18-20 and 36-37, note the teaching in column 3, lines 42-46 and column 4, lines 9-13 as well as Figures 1 and 3 of Bennett. Furthermore, note that Merritt shows a number indicia on the ear plug is well known in the art.

With respect to claims 22-23, note the object of Bennett is oriented by an alignment device 12, 24 for positioning the object within or near the printing device and since the alignment device functions to move the objects throughout the printing process (printing by the first and second printheads), it can broadly be considered to selectively position the object in “a plurality of orientations” as broadly recited by applicant.

With respect to claim 24, note the printing device of Bennett applies a pattern to the earplug from a plurality of positions as described in columns 5-8 and shown in Figure 3.

With respect to claims 25-26, 40, 42, and 45, note that Bennett teaches a process as recited including having a printing device including at least one nozzle (associated with a microprocessor and computer unit) and the nozzle

applying the pattern to a cylindrical object from a plurality of orientations. In particular, the plurality of orientations are achieved by maneuvering the at least one nozzle relative to the cylindrical object (see, for example, column 6, lines 17-28 and claims 11-16). Although Bennett does not specifically teach that the cylindrical object is an earplug, note Merritt teaches an ear protector having an indicia provided thereon is well known in the art. See, in particular, the Figure of Merritt. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide the printing process of Bennett to be used to print indicia upon a surface of any similar shaped object, such as an earplug or ear protector as shown in Merritt, to provide printed indicia upon earplugs to function as an advertisement or cheering aid.

With respect to claims 27 and 29, again note that Bennett in view of Merritt render obvious the process as recited. Note, in particular, the above comments with respect to claims 12-26 and that Bennett teaches communicating a pattern from a storage device to the printing device using a controller in column 4, lines 36-62.

With respect to claim 28, again note that Bennett in view of Merritt render obvious the process as recited. Note, in particular, the above comments with respect to claims 12-26 and that Bennett teaches orienting the printing device, with the controller (i.e., print engines 32, 34), relative to the object in column 6, lines 45-51.

With respect to claims 30-32, note that Bennett teaches the use of inkjet printers including at least one nozzle for ejecting ink. Although Bennett does not specifically teach the particular details of the inkjet printer structure as recited, note that inkjet printers including ejection of ink from nozzles with vibration as well as inkjet printers using charge electrodes to deflect the ink are well known in the art. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide any known inkjet printer structure of the inkjet device of Bennett as modified by Merritt, as it would simply require the obvious substitution of one known inkjet printhead arrangement for another to provide better printing of the indicia upon the article.

With respect to claim 35, note that Bennett teaches applying a pattern to the side surface of a cylindrical object is well known in the art, as exemplified by Figures 3.

9. Claims 12-14, 17-20, 22-27, 29-32, 34-37, 41, 43-44, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson (US 5,831,641) in view of Merritt (US Des. 349,571). Carlson teaches a process of applying a pattern to an object with a curved surface (such as a baseball bat or other generally cylindrically shaped object) including the steps of providing the object, orienting the object relative to a printing device, and printing a pattern on the object using the printing device. See, in particular, Figures 1 and 11 and columns 2-3. Although Carlson does not necessarily teach the object

printed upon is an earplug, note Merritt teaches an ear protector having an indicia provided thereon is well known in the art. See, in particular, the Figure of Merritt. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide the printing process of Carlson to be used to print indicia upon a surface of any similar shaped object, such as an earplug or ear protector as shown in Merritt, to provide printed indicia upon earplugs to function as an advertisement or cheering aid.

With respect to claims 13-14 and 34, note Carlson teaches the use of a non-contact printing device (i.e., ink jet printhead) in column 2, lines 24-28.

With respect to claim 17, note column 3, lines 20-30 of Carlson in particular.

With respect to claims 18-20 and 36-37, note the teaching in column 2, line 49 through column 3, line 10 of Carlson. Furthermore, note that Merritt shows a number indicia on the ear plug is well known in the art. Note Carlson teaches a plurality of printing devices (i.e., inkjet cartridges and inkjet heads) oriented relative to one another such that a plurality of patterns are formed on the earplug as broadly recited.

With respect to claims 22-23, 41, 43-44, and 46, note the object of Carlson is oriented by an alignment device (i.e., the article holding means described beginning in column 5, line 45) for positioning the object within or near the printing device and which functions to selectively position the object in a plurality of orientations during the printing process, by rotating the object.

With respect to claim 24, note that since the printing device of Carlson includes multiple inkjet heads, the printing device can broadly be considered to apply a pattern to the earplug from a plurality of positions as recited.

With respect to claims 25-26, 41, 43-44, and 46, note that Carlson teaches a process as recited including having a printing device including at least one nozzle (associated with a microprocessor and computer unit) and the nozzle applying the pattern to a cylindrical object from a plurality of orientations. In particular, the plurality of orientations are achieved by maneuvering the cylindrical object (i.e., by rotating) relative to the at least one nozzle (see, for example, claims 1-21). Although Carlson does not specifically teach that the cylindrical object is an earplug, note Merritt teaches an ear protector having an indicia provided thereon is well known in the art. See, in particular, the Figure of Merritt. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide the printing process of Carlson to be used to print indicia upon a surface of any similar shaped object, such as an earplug or ear protector as shown in Merritt, to provide printed indicia upon earplugs to function as an advertisement or cheering aid.

With respect to claims 27 and 29, again note that Carlson in view of Merritt render obvious the process as recited. Note, in particular, the above comments with respect to claims 12-26 and that Carlson teaches communicating a pattern from a storage device to the printing device using a controller in column 5, lines 1-22.

With respect to claims 30-32, note that Carlson teaches the use of inkjet printers including at least one nozzle for ejecting ink. Although Carlson does not specifically teach the particular details of the inkjet printer structure as recited, note that inkjet printers including ejection of ink from nozzles with vibration as well as inkjet printers using charge electrodes to deflect the ink are well known in the art. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide any known inkjet printer structure of the inkjet device of Carlson as modified by Merritt, as it would simply require the obvious substitution of one known inkjet printhead arrangement for another to provide better printing of the indicia upon the article.

With respect to claim 35, note that Carlson teaches applying a pattern to the side surface of a cylindrical object is well known in the art, as exemplified by Figures 2B and 11.

10. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roulleau (US 5,142,976) in view of Merritt (US Des. 349,571). Roulleau teaches a process for forming a pattern on an object with a curved outer surface comprising: providing the object, orienting the object relative to a printing device (for example, by placing object in side members 3), printing the pattern on the object using the printing device, the printing device comprising a plurality of printing device oriented relative one another such that a plurality of patterns are formed on the object, wherein the plurality of printing devices

are oriented one of 120°, 180°, and 90° relative to each other. Although Roulleau does not necessarily teach the object printed upon is an earplug, note Merritt teaches an ear protector having an indicia provided thereon is well known in the art. See, in particular, the Figure of Merritt. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide the printing process of Roulleau to be used to print indicia upon a surface of any similar shaped object, such as an earplug or ear protector as shown in Merritt, to provide printed indicia upon earplugs to function as an advertisement or cheering aid.

11. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vjestica (GB 2 284876) in view of Merritt (US Des. 349,571). Vjestica teaches a process of forming a pattern on a cylindrical shaped object including the steps of printing a first pattern on a side surface of the object and printing a second pattern on one of the opposing end surfaces. See Figure 2 and the abstract of Vjestica in particular. Although Vjestica does not necessarily teach the cylindrical object printed upon is an earplug, note Merritt teaches a cylindrically shaped ear protector having an indicia provided thereon is well known in the art. See, in particular, the Figure of Merritt. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide the printing process of Vjestica to be used to print indicia upon a surface of any similar shaped object, such as an earplug or ear protector as

shown in Merritt, to provide printed indicia upon various surfaces of the earplugs to function as an advertisement or cheering aid.

12. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vjestica in view of Merritt as applied to claim 38 above, and further in view of Roulleau (US 5,142,976). Vjestica in view of Merritt teach a printing process as recited, with the exception of providing any details as to how the patterns are printed. Roulleau teaches it is well known in the art to provide first and second printing devices 12, 8 to apply patterns to different surfaces (i.e. side and end) of an object simultaneously. See, for example, column 2, lines 30-41. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide first and second printing devices as taught by Roulleau in the process of Vjestica as modified by Merritt to allow for faster, simultaneous printing of both the side and end surface of the earplug to provide the earplug with advertisements or other indicia as desired by the user.

### ***Response to Arguments***

13. Applicant's arguments filed October 18, 2004 and May 2, 2005 have been fully considered but they are not persuasive of any error in the above rejections.

First, applicant argues that there is no motivation to combine the references because the pellet shaped objects of Ackley are not objects of similar



shape, composition, and/or properties to hearing protectors or earplugs. In particular, applicant argues that the pellet-shaped items such as candies, pills, tablets, etc. disclosed by Ackley are items formed of “a solid dense mass and are generally of a hard, non-compressible nature,” as evidenced by the ordinary meaning of the term “pellet” as defined by The American Heritage Dictionary of the English Language provided by applicant. Applicant further states that earplugs are recognized by one of ordinary skill in the art as a generally softer, compressible, resilient element particularly sized to occlude the ear canal. Therefore, there is no suggestion to motivate one of ordinary skill in the art to apply the pellet printing process of Ackley to an object such as an earplug since it has entirely different mechanical properties and entirely different printing considerations from that of a pellet.

The Examiner disagrees with this argument for several reasons. First, the Examiner points out that the claims as currently written do not necessarily require the earplugs to be “resilient” or “compressible”. Additionally, it is unclear how the particular hard or resilient nature of the object being printed has any effect on the printing process or structure as recited, particularly when the printing device is a non-contact printing device. Furthermore, applicant’s contention of the meaning of the term “pellet” is not necessarily the broadest reasonable interpretation of the term. In particular, the Examiner points out that Merriam Webster’s Collegiate Dictionary (Tenth Edition) defines a “pellet” as “a usu. small rounded, spherical, or cylindrical body (as of food or

medicine).” Therefore, one of ordinary skill in the art would recognize that the pellet-shaped object in Ackley would comprise a small rounded, spherical, or cylindrical body. This interpretation does not necessarily limit the term to any particular material properties of brittleness, hardness, or compressibility.

Regardless, Ackley describes that “the pellet-shaped articles may be regularly shaped, such as capsules, caplets, pills, tablets, and other spherical, oval, or cylindrical, or even polygonal shapes, as well as irregularly shaped articles.” (see column 4, lines 50-53). It is the Examiner’s position that at least some of these items, such as capsules or candies (as set forth by applicant), are not necessarily items formed of “a solid dense mass and generally of a hard, non-compressible nature” as argued by applicant. For example, Merriam Webster’s Collegiate Dictionary (Tenth Edition) defines a capsule as “a shell usually of gelatin for packaging something (as a drug or vitamin).” Additionally, there are a wide variety of candies that can be considered resilient or compressible to some extent. Thus, it is the Examiner position that a capsule made of gelatin or certain types of candy are broadly resilient and compressible to some extent and therefore similar in material composition/behavior to a resilient body such as an earplug.

Applicant also argues that Merritt does not specifically teach an earplug since the patent only discloses a “combination ear protector and cheering aid” and according to applicant, the terms “cheering aid” and “ear protector” are vague and unclear in meaning and therefore Merritt fails to teach an earplug as

recited. Furthermore, applicant argues that the object shown in Merritt may not be an earplug at all, but instead could be any item relating to ear protection, such as an ear muff, a filter for a head phone assembly, an elongate cylindrical pillow to protect a user's ears while sleeping, etc. Again, the Examiner disagrees with this argument. It is the Examiner's position that one of ordinary skill in the art would easily recognize the item of Merritt to be an earplug with indicia provided on it which functions to reflect the user's favorite athletes (i.e., player numbers in football, basketball, etc. or driver number such as in NASCAR race cars) or other items. Clearly, persons attending sporting events in large stadiums/race tracks would be subjected to noise levels which would encourage them to protect their ears/hearing with earplugs.

Furthermore, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, although Merritt merely shows an ear protector with indicia provided thereon and is silent with respect to whether the indicia is printed, it is the Examiner's position that it would have been obvious to one of ordinary skill in the art to use a printing

arrangement to print the indicia upon the ear protector, since printing is a well known way of applying indicia to articles. Furthermore, Ackley teach printing arrangements for printing relatively small and resilient objects having curved surfaces. Therefore, it would have been obvious to one of ordinary skill in the art to use the printing process taught by Ackley to print indicia upon an earplug (i.e., a relatively small article with a curved surface) to provide an earplug with printed indicia that functions as a cheering aid.

In response to applicant's argument that even if Ackley and Merritt were combined, one of ordinary skill in the art would not have a reasonable likelihood of success in forming the invention of claim 12 since the pellet printing device of Ackley could not be used to print upon an elongated cylindrical article as disclosed by Merritt, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Again, it is the Examiner's position that the objects being printed in Ackley are reasonably similar to the object shown in Merritt (in terms of size and shape) and therefore, one of ordinary skill in the art would recognize that the printing device of Ackley could be used to provide the indicia on the cylindrical objects as taught by Merritt.

With respect to claim 15, applicant argues that Ackley fails to teach or suggest impact printing techniques as recited in claim 15. In particular, applicant states that the contact printing system described by Ackley (for example, in column 12, lines 29-48 and Figures 15-17 of Ackley) includes printing rollers which transfer the design to the object to the printed. Applicant further argues that the printing rollers taught by Ackley do not constitute an “impact printing device” as claimed by Applicant. The Examiner disagrees with this argument. It is noted that applicant has defined both “impact” and “non-impact” printing devices in lines 16-23 on page 7 of the specification. An “impact” printing device is specifically defined by applicant as a device which makes at least partial contact with the object being printed during the print transfer. Therefore, since the print rollers contact the objects being printed in Ackley, it is the Examiner’s position that Ackley teach an “impact printing device” to the extent defined by applicant.

With respect to claims 22-23, applicant argues that Ackley does not teach selectively positioning an earplug (or pellet) in a plurality of orientations during a printing process. Again, the Examiner disagrees. In particular, the Examiner points out that Ackley teaches that the printing process can include multiple printheads positioned along different portions of the conveyor to allow multiple indicia (i.e., different markings, different colors) to be applied to the pellets in column 8, lines 34-39. Ackley further states the printheads could be positioned along the inclined or declined portion of the device. Since the

alignment device 10, 12, 25 moves and positions the earplug through the process, it can broadly be considered to “selectively position” the earplug in a plurality of orientations (i.e. along the incline portion, the horizontal portion, and the decline portion) during the printing process.

With respect to claim 27, applicant argues that Ackley fails to teach or suggest a step of orienting the earplug, with an orientation mechanism, relative to the printing device, since Ackley merely teaches conveying the pellets past the printhead in a single orientation. The Examiner is unsure what applicant is arguing in this case. In particular, the Examiner points out that Ackley includes an orientation mechanism 10, 12, 25 for orienting the earplug relative to the printing device. Even if Ackley only conveys the pellets past the printhead in a single orientation as applicant argues, the claim language as currently written does not require orienting the earplug in more than one orientation and therefore Ackley meets the claim language as recited.

In view of the above reasoning, the above rejections are deemed appropriate by the Examiner.

### ***Response to Amendment***

14. The supplemental declaration under 37 CFR 1.132 filed May 2, 2005 is insufficient to overcome the rejection of claims 12-20, 22-24, 27, 29-37 based upon 35 USC 103 as set forth in the last Office Action, as well and the new rejections of the claims set forth in this Office Action because: The evidence of

commercial success has not been afforded much weight for the following reasons:

First, it is not clear from the supplemental declaration that applicant has established the required nexus--i.e., that the claimed features of the invention were responsible for the commercial success of the article. In particular, it is noted that the commercial success set forth in the declaration related to the sales of the product, and the claims are drawn to the process of making the product, not the product itself.

Furthermore, the evidence supplied by applicant in item #8 to show commercial success of the EARSof Yellow Neon Blasts is lacking in providing detailed economic evidence that makes it clear that the success was attributable to the characteristics of applicant's invention rather than to other factors or causes. MPEP 716.04(IV) states that sales figures must be adequately defined and that gross sales figures do not show commercial success absent evidence as to market share, as to what sales would normally be expected in the market, etc.

Additionally, although applicant has set forth in item #6 that the two products were sold at identical prices, "similarly packaged," advertised "similarly", etc., it is still not absolutely clear to the Examiner that the apparent increased sales of the EARSof Yellow Neon Blasts was due to the Blasts being made so as to include a printed pattern. For example, what is meant by the term "similarly" as set forth by applicant. Furthermore, it is the Examiner's

position that the commercial success of the product may still be due to other factors, such as increased availability of the EARSof Yellow Neon Blasts over the EARSof Yellow Neon earplugs.

In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

### ***Conclusion***


15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Coningsby (US 6,220,154 B1) and Taylor (US 2004/0139976 A1) each teach a printing process for applying indicia to cylindrically shaped objects having obvious similarities to the claimed subject matter.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Leslie J. Evanisko** whose telephone number is **(571) 272-2161**. The examiner can normally be reached on M-Th 7:30 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Leslie J. Evanisko  
Primary Examiner  
Art Unit 2854

lje  
August 9, 2005